

14
reducing the stress generated in said flexible member constituted by a corner of said retaining member, wherein said corner is located within said flexible member in an area adjoining said flexible tip.

REMARKS

The objection to Claim 10 has been addressed above.

Likewise, the rejection of Claim 3 under 35 USC § 112, ¶ 2 is deemed moot in light of the above amendment thereto.

The rejection of Claims 1 and 5 as being anticipated by Friend et al. under 35 USC § 102(b) and the rejections of Claims 2 and 8 as being unpatentable over Friend et al. in view of Vegella, of Claim 3 as being unpatentable over Friend et al. in view of Otto et al., of Claims 4, 6 and 7 as being unpatentable over Friend et al. in view of Nagasawa, of Claim 9 as being unpatentable over Friend et al. in view of Wada et al., and of Claim 10 as being unpatentable over Friend et al. in view of Vegella, Otto et al., Nagasawa, Wada et al. and Staudt et al., under 35 USC § 103(a), are traversed. Reconsideration is requested on grounds that the claims, as amended, clearly define over the Friend et al. patent alone or in purported combination with the above-mentioned documents. Furthermore, the Office Action does not set forth a *prima facie* either of anticipation and/or obviousness with regard to the amended claims.

The lynchpin of all the rejections is the Friend et al. rod scraper patent in which an elastomeric ring member 28 has a first axial end portion 30, an opposite second axial end portion 32, a circumferential radial outer surface 34, a

circumferential radial inner surface 36. In addition, the outer surface 34 is provided with a backing ring 48 having a curved portion 50 overlaying the curved portion 46 of the elastomeric ring member 28. The backing ring is designed to resiliently bias against the curved outer surface to urge the lip of the elastomeric ring member against the rod and to allow flexible movement of the rod while maintaining the lip in contact therewith.

There is not the slightest teaching or suggestion in Friend et al., or for that matter in the other secondary references relied upon by the Examiner, to configure the backing ring 40 in such a manner so as to have a corner located within the flexible member for the purpose of relieving stresses. Indeed, one of ordinary skill in the art would not have done so without destroying the very purpose for which the Friend et al. backing ring was provided.

Thus, assuming *arguendo* that the teachings of Vegella, Otto et al., Nagasawa, Wada et al. and/or Staudt et al. would have been combinable with the teachings of Friend et al. without the exercise of impermissible hindsight (an assumption with which applicants do not agree), the resulting hypothetical combination still would not have taught or suggested the claimed subject matter.

Accordingly, reconsideration and favorable action upon this case are earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #381AS/50347).

Respectfully submitted,

November 1, 2002



James F. McKeown
Registration No. 25,406

CROWELL & MORING, LLP
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844

JFM/acd
056203.50347US

VERSION WITH MARKINGS TO SHOW CHANGES

IN THE CLAIMS:

1. (Amended) A seal mechanism [including] , comprising an annular retaining member, [and] a flexible member molded in one piece with the retaining member and having a flexible tip to perform a sealing function, [wherein said seal mechanism comprises] and a stress reduction mechanism for reducing the stress generated in said flexible member [near the inside] constituted by a corner of said retaining member, wherein said corner is located within said flexible member in an area adjoining said flexible tip.

3. (Amended) The seal mechanism according to claim 1, wherein said stress reduction mechanism is constructed such that an inside corner of said retaining member has a curved surface with a radius of curvature equal to or larger than 0.1 mm.

10. (Amended) A fuel pump comprising a reciprocating plunger, and a cylinder which is slip-fitted with the plunger and in which a variable-volume pressurizing chamber is formed with the reciprocating motion of said plunger, wherein said fuel pump is provided with the seal mechanism according to any of claims 1 to 9 between the [plunder] plunger and cylinder.